CLIPPEDIMAGE= JP402036281A

PAT-NO: JP402036281A

DOCUMENT-IDENTIFIER: JP 02036281 A

TITLE: COLOR PENCIL LEAD AND CRAYON ERASABLE WITH ERASER

PUBN-DATE: February 6, 1990

INVENTOR-INFORMATION:

NAME

KUWABARA, HIDEO

ASSIGNEE-INFORMATION:

NAME

COUNTRY TOMBOW PENCIL CO LTD N/A

APPL-NO: JP63185052 APPL-DATE: July 26, 1988

INT-CL_(IPC): C09D013/00; C09D013/00

US-CL-CURRENT: 523/164

ABSTRACT:

PURPOSE: To obtain the subject lead and crayon, having soft writing conditions,

capable of wet-on-wet coating and rich in coloring properties with a sufficient

breaking strength without fouling paper surfaces after writing by using a

thermoplastic resin, lubricant, cellular inorganic substance-containing

extender material and pigment as principal materials.

CONSTITUTION: The objective lead and crayon containing (A) a thermoplastic

copolymer consisting of, e.g., PE or PP and ethylene/vinyl acetate copolymer,

(B) a lubricant, such as higher fatty acid, metallic soap or paraffin wax, (C)

an extender material, such as talc, titanium oxide or calcium carbonate,

containing cellular inorganic substances and (D) a pigment as principal

materials. Furthermore, cellular silica, diatomaceous earth powder, etc., are

cited as examples of the cellular inorganic substances.

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DERWENT-ACC-NO: 1990-085886

DERWENT-WEEK: 199012

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TITLE: Coloured lead of pencil and crayon - contain thermoplastic

resin,

lubricant, pigment and porous inorganic filler

PATENT-ASSIGNEE: TOMBOW PENCIL CO [TOMBN]

PRIORITY-DATA: 1988JP-0185052 (July 26, 1988)

PATENT-FAMILY:

PUB-NO PUB-DATE LANGUAGE PAGES

MAIN-IPC

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N/A

APPLICATION-DATA:

PUB-NO APPL-DESCRIPTOR APPL-NO

APPL-DATE

JP02036281A N/A 1988JP-0185052 July

26, 1988

INT-CL_(IPC): C09D013/00
ABSTRACTED-PUB-NO: JP02036281A

BASIC-ABSTRACT:

A coloured pencil lead and a crayon which can be effaced with an eraser comprise thermoplastic resin, lubricant, and pigment, and filler which contains

porous inorganic material.

This coloured pencil lead and crayon have a well balanced combination of soft

writing touch, high tinting, strong flexural strength, and eraseability.

A representative example comprises thermoplastic resins (90 pts. wt. of

polyethylene and 15pts. wt. of ethylene-vinyl acetate copolymer), lubricants

(50 pts. wt. of 135 deg. F paraffin and 40 pts. wt. of stearic acid),

non-porous fillers (20 pts. wt. of talc and 10 pts. wt. of TiO2), porous

filler (5 pts. wt. of porous silica) and 5 pts. wt. of pigment.

DERWENT-CLASS: A17 A84 G02

CPI-CODES: A12-D05B; G02-A04;